

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	("5319395" "6249824" "5784366" "5909435" "5877742" "5303393" "5365516" "5526357" "5764691" "5894494" "5999562" "6072185" "6237122" "5507024" "5805155" "5848072" "6181609" "4455483" "5177796" "5274508" "5321699" "5386422" "5388074" "5469444" "5481531" "5506965" "5684774" "5841717" "5917429" "6178121" "6243348" "4415792" "4451108" "4502082" "4796260" "4972474" "5280584" "5377102" "5382508" "5440686" "5477492" "5511212" "5537945" "5561671" "5583975" "5657398" "5684693" "5724241" "5742509" "5831903" ) and "mold design" and cad\$4 and (product near design)	USPAT	OR	OFF	2007/09/11 19:22
L3	1143	("5319395" "6249824" "5784366" "5909435" "5877742" "5303393" "5365516" "5526357" "5764691" "5894494" "5999562" "6072185" "6237122" "5507024" "5805155" "5848072" "6181609" "4455483" "5177796" "5274508" "5321699" "5386422" "5388074" "5469444" "5481531" "5506965" "5684774" "5841717" "5917429" "6178121" "6243348" "4415792" "4451108" "4502082" "4796260" "4972474" "5280584" "5377102" "5382508" "5440686" "5477492" "5511212" "5537945" "5561671" "5583975" "5657398" "5684693" "5724241" "5742509" "5831903" )".pn"	USPAT	OR	OFF	2007/09/11 19:21

## EAST Search History

L4	50	("5319395" "6249824" "5784366" "5909435" "5877742" "5303393" "5365516" "5526357" "5764691" "5894494" "5999562" "6072185" "6237122" "5507024" "5805155" "5848072" "6181609" "4455483" "5177796" "5274508" "5321699" "5386422" "5388074" "5469444" "5481531" "5506965" "5684774" "5841717" "5917429" "6178121" "6243348" "4415792" "4451108" "4502082" "4796260" "4972474" "5280584" "5377102" "5382508" "5440686" "5477492" "5511212" "5537945" "5561671" "5583975" "5657398" "5684693" "5724241" "5742509" "5831903" ).pn.	USPAT	OR	OFF	2007/09/11 19:21
L5	0	4 and cad\$4 same (product near design)	USPAT	OR	OFF	2007/09/11 19:28
L6	35	(700/98 717/136 715/523 709/247) and cad\$4 and mold\$3 and (product near design)	US-PGPUB; USPAT	OR	OFF	2007/09/11 19:29

## EAST Search History

L4	50	("5319395" "6249824" "5784366" "5909435" "5877742" "5303393" "5365516" "5526357" "5764691" "5894494" "5999562" "6072185" "6237122" "5507024" "5805155" "5848072" "6181609" "4455483" "5177796" "5274508" "5321699" "5386422" "5388074" "5469444" "5481531" "5506965" "5684774" "5841717" "5917429" "6178121" "6243348" "4415792" "4451108" "4502082" "4796260" "4972474" "5280584" "5377102" "5382508" "5440686" "5477492" "5511212" "5537945" "5561671" "5583975" "5657398" "5684693" "5724241" "5742509" "5831903" ).pn.	USPAT	OR	OFF	2007/09/11 19:21
L5	0	4 and cad\$4 same (product near design)	USPAT	OR	OFF	2007/09/11 19:22
S1	185	(data adj conversion).ti.	USPAT	OR	OFF	2005/05/07 14:41
S2	0	S1 and (internet with upload) and CAD	USPAT	OR	OFF	2004/09/29 20:49
S3	1	(data adj conversion) and (internet with upload) and CAD	USPAT	OR	OFF	2004/09/29 22:27
S4	3	(data adj conversion) and (internet with upload) and CAD	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/02/15 17:58
S5	8143	716/19 705/1 709/246 709/203-217	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 22:40
S6	9	(data near2 conversion) and (internet with upload)	USPAT	OR	OFF	2006/02/20 18:12
S7	38	(data near2 conver\$5) and (internet with upload)	USPAT	OR	OFF	2004/09/29 22:27
S8	7	(data near2 conver\$5) same format same (one differnt primary second\$3 first) and (internet with upload)	USPAT	OR	OFF	2004/09/29 22:29
S9	0	(data near2 conver\$5) same format same (one differnt primary second\$3 first) and (internet with upload) and (cad (three with dimensional))	USPAT	OR	OFF	2004/09/29 22:30
S10	3	S5 and (data adj conversion) and (internet with upload) and CAD	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/29 22:41

## EAST Search History

S11	44	("4812962"   "5051598"   "5182718"   "5241185"   "5242770"   "5256505"   "5316878"   "5326659"   "5340700"   "5424154"   "5432714"   "5447810"   "5532090"   "5533148"   "5538815"   "5553273"   "5572598"   "5631110"   "5657235"   "5663893"   "5702848"   "5705301"   "5707765"   "5740068"   "5795688"   "5801954"   "5804340"   "5815685"   "5825647"   "5827623"   "5847959"   "5849440"   "5862058"   "5863682"   "6009250"   "6009251"   "6011911"   "6016357"   "6076465"   "6078738"   "6081658"   "6081659"   "6130750"   "6171731"   "2002/0019729").PN.	USPAT	OR	OFF	2004/09/29 22:41
S12	15	"6171731".URPN.	USPAT	OR	OFF	2004/09/29 22:42
S13	44	("4812962"   "5051598"   "5182718"   "5241185"   "5242770"   "5256505"   "5316878"   "5326659"   "5340700"   "5424154"   "5432714"   "5447810"   "5532090"   "5533148"   "5538815"   "5553273"   "5572598"   "5631110"   "5657235"   "5663893"   "5702848"   "5705301"   "5707765"   "5740068"   "5795688"   "5801954"   "5804340"   "5815685"   "5825647"   "5827623"   "5847959"   "5849440"   "5862058"   "5863682"   "6009250"   "6009251"   "6011911"   "6016357"   "6076465"   "6078738"   "6081658"   "6081659"   "6130750"   "6171731"   "2002/0019729").PN.	USPAT	OR	OFF	2005/05/07 14:52
S14	0	S13 and mold	USPAT	OR	OFF	2005/05/07 14:41
S15	0	(data adj conversion).ti. and mold	USPAT	OR	OFF	2005/05/07 14:41
S16	0	(mold near design) and (converting near data) and upload\$3 and internet	USPAT	OR	OFF	2005/05/07 14:52
S17	0	((mold pattern die shape cast) near design) and (converting near data) and upload\$3 and internet	USPAT	OR	OFF	2005/05/07 14:53
S18	1	((mold pattern die shape cast) near design) and (converting near data) and upload\$3 and internet	US-PGPUB; USPAT	OR	OFF	2005/05/07 14:55
S20	190	((mold pattern die shape cast) near design) and convert\$3 and mask and internet	US-PGPUB; USPAT	OR	OFF	2005/05/07 15:09
S21	137	((mold pattern die shape cast) near design) and convert\$3 and mask and internet and primary and second\$5	US-PGPUB; USPAT	OR	OFF	2005/05/07 14:57

## EAST Search History

S22	87	((mold pattern die shape cast) near design) and convert\$3 and mask and internet and primary and second\$5 and (application software program) and upload\$3	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:47
S23	91	((mold pattern die shape cast) near design) and convert\$3 and mask and internet and (primary with convert\$3 data with second\$5 ) and (application software program) and upload\$3	US-PGPUB; USPAT	OR	OFF	2005/05/07 15:05
S24	89	((mold pattern die cast) near design) and convert\$3 and mask and internet and (primary with convert\$3 data with second\$5 ) and (application software program) and upload\$3	US-PGPUB; USPAT	OR	OFF	2006/02/13 21:28
S25	0	((mold cast) near design) and convert\$3 and mask and internet and (primary with convert\$3 data with second\$5 ) and (application software program) and upload\$3	US-PGPUB; USPAT	OR	OFF	2005/05/07 15:05
S26	89	((mold pattern cast) near design) and convert\$3 and mask and internet and (primary with convert\$3 data with second\$5 ) and (application software program) and upload\$3	US-PGPUB; USPAT	OR	OFF	2005/05/07 15:07
S27	108	((mold pattern circuit cast) near design) and convert\$3 and mask and internet and (primary with convert\$3 data with second\$5 ) and (application software program) and upload\$3	US-PGPUB; USPAT	OR	OFF	2005/05/07 15:08
S28	209	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (convert\$3 with data with (image mask))	US-PGPUB; USPAT	OR	OFF	2005/05/07 15:10
S29	168	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (convert\$3 with data with (image mask))	USPAT	OR	OFF	2005/05/07 15:33
S30	6	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (convert\$3 with data with (image mask)) and upload\$3	USPAT	OR	OFF	2006/02/20 18:08
S31	6	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (convert\$3 with data with (image mask)) and upload\$3 and (pattern mold shape cast die form)	USPAT	OR	OFF	2005/05/07 15:24
S32	1	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (convert\$3 with data with (image mask)) and upload\$3 and (pattern mold shape cast die )	USPAT	OR	OFF	2005/05/07 15:13

## EAST Search History

S33	4	("5682323"   "5952133"   "6151101"   "6307209").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/07 15:14
S34	7	("5952133").URPN.	USPAT	OR	OFF	2005/05/07 15:16
S35	8	"6578188"	USPAT	OR	OFF	2005/05/07 15:24
S36	169	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (mold)	USPAT	OR	OFF	2007/09/03 22:46
S37	1	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (mold near design)	USPAT	OR	OFF	2005/05/07 15:33
S38	42	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (mold) and convert\$3 and (mask image)	USPAT	OR	OFF	2005/05/07 16:52
S39	1	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (mold) and convert\$3 and (mask image) and internet	USPAT	OR	OFF	2005/05/07 15:35
S40	42	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (mold) and convert\$3 and (mask image)	USPAT	OR	OFF	2005/05/07 16:52
S41	0	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (mold) and convert\$3 and (mask image) and (different with format)	USPAT	OR	OFF	2005/05/07 16:52
S42	8	(716/19 7a6/20 716/21 716/5 430/5 709/226) and (mold) and convert\$3 and (mask image) and (different and format)	USPAT	OR	OFF	2005/05/07 16:53
S43	10	"6721769"	US-PGPUB; USPAT	OR	OFF	2006/02/13 21:32
S44	2	"6741265"	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:12
S45	12	"6578188"	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:19
S46	2799	(mold near design)	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:21
S48	1	S46 and (cad\$4 cam\$tool) and software and server and (pro\$engineer i\$ideas "catia")	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:24
S49	87	S46 and (cad\$4 cam\$tool) and software	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:24
S50	9	S46 and (cad\$4 cam\$tool) and software and server and (product near design)	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:37
S51	1	S46 and (cad\$4 cam\$tool) and software and server and (product near design) and conversion	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:25

## EAST Search History

S52	4	S46 and (cad\$4 cam\$tool) and software and server and (product near design) and conver\$6	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:25
S53	10	("20020004911"   "4901068"   "5317564"   "5325522"   "5491473"   "5526257"   "5659491"   "5822205"   "5930798"   "6400998").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/13 22:27
S54	5	"6850946"	US-PGPUB; USPAT	OR	OFF	2006/02/13 22:37
S55	115	("4675147"   "4736453"   "4885694"   "5111392"   "5119307"   "5239487"   "5293640"   "5307261"   "5337149"   "5339184"   "5375123"   "5394522"   "5450615"   "5458123"   "5465390"   "5467441"   "5482050"   "5485568"   "5491644"   "5491837"   "5493679"   "5515269"   "5528518"   "5539665"   "5553312"   "5553620"   "5555354"   "5561841"   "5564070"   "5586254"   "5594946"   "5598532"   "5625827"   "5636344"   "5689355"   "5710758"   "5755072"   "5761093"   "5774669"   "5794128"   "5799154"   "5802146"   "5809282"   "5815395"   "5821937"   "5825759"   "5828960"   "5831610"   "5832389"   "5845124"   "5861887"   "5867112"   "5877777"   "5878328"   "5907850"   "5917808"   "5923850"   "5926762"   "5940196"   "5945976"   "5948055"   "5949335"   "5949988"   "5953669"   "5963867"   "5970406"   "5977851"   "5987328"   "5994984"   "6006021"   "6018625"   "6021316"   "6032105"   "6038547"   "6044273"   "6058102"   "6058262"   "6059842"   "6061722"   "6075541"   "6085335"   "6088522"   "6104699"   "6108309"   "6111857"   "6119009"   "6122083"   "6148010"   "6199032"   "6204813"   "6208833"   "6215495"   "6229540"   "6243772"   "6253086"   "6272447"   "6285377"   "6289203"   "6311144"   "6317599"   "6326987"   "6330005"   "6337688"   "6338031"   "6356758"   "6384823"   "6393432"   "6408312"   "6442507"   "6470195"   "6487417"   "6493679"   "6496290"   "6499006"   "6505045").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/14 13:59
S56	21	"659125"	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/14 13:59

## EAST Search History

S57	7	"6591295"	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/14 21:32
S58	5	"6694361" and partition	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/14 21:34
S59	0	partition adj manger	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/14 21:34
S60	9	partition adj manger	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/25 19:00
S61	261	partition adj manager	US-PGPUB; USPAT; USOCR	OR	OFF	2006/02/14 21:34
S68	2	(Application adj server) same conversion same format same data	USPAT	OR	OFF	2006/02/15 22:14
S69	5	(Application adj server) same cad	USPAT	OR	OFF	2006/02/20 15:40
S70	6	notifying with e\$mail with completion	USPAT	OR	OFF	2006/02/20 17:43
S71	84	(notif\$6 alert\$3) same e\$mail same completion	USPAT	OR	OFF	2006/02/20 17:44
S72	17	S71 and (application near server)	USPAT	OR	OFF	2006/02/20 17:44
S73	8	(716/19 716/20 716/21 716/5 430/5 709/226) and (convert\$3 with data with (image mask)) and upload\$3	USPAT	OR	OFF	2006/02/20 18:11
S74	58	(709/205 709/218 709/229 709/226) and (convert\$3 with data with (image mask)) and upload\$3	USPAT	OR	OFF	2006/08/26 14:38
S75	0	S74 and (data near2 conversion) and (internet with upload)	USPAT	OR	OFF	2006/02/20 18:13
S76	39	S74 and (data near2 conversion)	USPAT	OR	OFF	2006/02/20 18:13
S77	1	"6999907"	US-PGPUB; USPAT	OR	OFF	2006/08/25 12:41
S78	10	("4885694"   "4912657"   "4922432"   "4964060"   "5444843"   "5646992"   "5903886"   "5930779"   "6134338"   "6232985").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/25 12:43
S79	3	asp same upload\$3 same cad	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:37
S80	3	cad\$cam same internet same conver\$6 same design	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:39
S81	10	cad\$cam same (internét web remote asp ) same conver\$4 same design	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:41



## EAST Search History

S82	65	(cad\$cam computer\$aided (design near2 (program software)) ) same (internet web remote asp ) same conver\$4 same design	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 19:06
S83	90	(cad\$cam computer\$aided (design near2 (program software)) ) same (internet web remote asp ) same conver\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:49
S84	24	(cad\$cam computer\$aided (design near2 (program software)) ) same (internet web remote asp ) same conver\$4 same (upload\$3 transmit\$4)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:44
S85	0	(cad\$cam computer\$aided (design near2 (program software)) ) same (internet web remote asp ) same conver\$4 same (upload\$3 transmit\$4) same raw	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 11:53
S86	7	(cad\$cam computer\$aided (design near2 (program software)) ) same (internet web remote asp ) same conver\$4 same (upload\$3 transmit\$4) and raw	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:45
S87	4	(cad\$cam computer\$aided (design near2 (program software)) ) same (internet web remote asp ) same (converting formating)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:50
S88	4	(cad\$cam autocad computer\$aided (design near2 (program software)) ) same (internet web remote asp ) same (converting formating)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 10:53
S89	26	"5893082"	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 11:11
S91	13	(landscape and home).clm.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 11:12
S92	165	(cad\$cam computer\$aided autocad 3d\$cad (design near2 (program software)) ) same (asp ((application remote ) near3 server))	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 11:55
S93	8	(cad\$cam computer\$aided autocad 3d\$cad (design near2 (program software)) ) same (asp ((application remote ) near3 server)).clm.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 11:56
S94	0	(cad\$cam computer\$aided autocad 3d\$cad (design near2 (program software)) ) same (asp ((application remote ) near3 server)).clm. and converting	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 11:56

## EAST Search History

S95	6	("20030074174"   "6377865"   "6608913"   "6701006"   "6834253"   "6925198").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 12:03
S96	6	"703"/\$.cccls. and server and application and 3d and converting and mold	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 12:05
S97	3	"703"/\$.cccls. and server and application and 3d and upload\$3 and mold	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 14:41
S98	13	("20030085921"   "5446842"   "5694544"   "5845299"   "6230066"   "6232982"   "6295513"   "6393422"   "6397117"   "6654032"   "6654737"   "6680730"   "6957186").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 14:36
S99	5547	703/1 703/2 703/7 703/13 703/22 703/23	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/26 14:38
S10 0	11651	(709/205 709/204 709/217 709/218)	USPAT	OR	OFF	2006/08/26 14:41
S10 1	16254	S99 S100	USPAT	OR	OFF	2006/08/26 14:41
S10 2	95	S101 and server and application and 3d and upload\$3	USPAT	OR	OFF	2006/08/26 14:41
S10 3	2	("6,295,513" "6,542,937").pn.	US-PGPUB; USPAT	OR	OFF	2007/01/31 16:33
S10 4	1	("6918113").pn.	US-PGPUB; USPAT	OR	OFF	2007/01/31 18:57
S10 5	1	"20020019745"	US-PGPUB; USPAT	OR	OFF	2007/01/31 18:57
S10 6	1	"20020019745" and plurality	US-PGPUB; USPAT	OR	OFF	2007/01/31 20:04
S10 7	1	CAM\$TOOL and C3 and CADCEUS	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 19:06
S10 8	1	CAM\$TOOL and CADCEUS	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 19:06
S10 9	27	CAM\$TOOL	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 19:08
S11 0	1	(screen browser) same list same format same mold same design	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 19:08
S11 1	36	("6295513").URPN.	USPAT	OR	OFF	2007/01/31 19:24

## EAST Search History

S11 2	0	"703"/\$.ccls and (design with prduct with format)	USPAT	OR	OFF	2007/01/31 19:26
S11 3	0	"703"/\$.ccls and (design with product with format)	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:26
S11 4	0	"703"/\$.ccls and (design with product )	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:26
S11 5	0	"703"/\$.ccls	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:26
S11 6	0	"703"/\$.ccls. and (design with product with format)	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:26
S11 7	10212	"703"/\$.ccls.	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:34
S11 8	731	S117 and design with (display screen)	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:28
S11 9	13	S117 and design with (display screen) with (format form) with (select\$3 choice list option)	US-PGPUB; USPAT	OR	ON	2007/01/31 19:28
S12 0	2	("5604886").URPN.	USPAT	OR	OFF	2007/01/31 19:32
S12 1	54	S117 and (mold same product)	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:34
S12 2	7	S117 and (mold same product) same conver\$5	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:42
S12 3	7	S117 and (mold same product) same conver\$5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 19:42
S12 5	231	(mold same product) same design same conver\$5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 19:43
S12 6	22	S125 and network	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 19:43
S12 7	50	format same product same design same (display screen) same select\$4	US-PGPUB; USPAT	OR	OFF	2007/01/31 19:48

## EAST Search History

S12 8	95	format same product same design same (display screen) same select\$4	US-PGPUB; USPAT	OR	ON	2007/01/31 19:55
S12 9	23	S128 and cad	US-PGPUB; USPAT	OR	ON	2007/01/31 19:55
S13 2	5	"345"/\$.ccls. and cad with mold with design	US-PGPUB; USPAT	OR	OFF	2007/01/31 20:06
S13 3	150	cad with mold with design	US-PGPUB; USPAT	OR	OFF	2007/01/31 20:07
S13 4	6	( cad with mold with design) same (network internet web )	US-PGPUB; USPAT	OR	OFF	2007/01/31 20:08
S13 5	10	( cad with mold with design) same (network internet web )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/01/31 21:12
S13 6	81	( product\$4 with mold\$3 with design). clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 21:24
S13 7	8	((mold\$3 adj2 design\$3) and (product\$4 adj2 design\$3)) same (network internet web)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/31 21:25
S13 8	4	("6741265").URPN.	USPAT	OR	OFF	2007/01/31 21:27
S13 9	14	("5206934"   "5282127"   "5539886"   "5655110"   "5687094"   "5822206"   "6008804"   "6115641"   "6116766"   "6158903"   "6249714"   "6253115"   "6295513"   "6473720").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 21:30
S14 0	380	((("5206934"   "5282127"   "5539886"   "5655110"   "5687094"   "5822206"   "6008804"   "6115641"   "6116766"   "6158903"   "6249714"   "6253115"   "6295513"   "6473720")) and (display screen User adj interface browser window)	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 21:33

## EAST Search History

S14 1	97	((("5206934"   "5282127"   "5539886"   "5655110"   "5687094"   "5822206"   "6008804"   "6115641"   "6116766"   "6158903"   "6249714"   "6253115"   "6295513"   "6473720"))) and (display screen User adj interface browser window) and (cad cam cad\$cam)	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 21:33
S14 2	40	((("5206934"   "5282127"   "5539886"   "5655110"   "5687094"   "5822206"   "6008804"   "6115641"   "6116766"   "6158903"   "6249714"   "6253115"   "6295513"   "6473720"))) and (display screen User adj interface browser window) and (cad cam cad\$cam) and conver\$5 and format	US-PGPUB; USPAT; USOCR	OR	OFF	2007/01/31 21:38
S14 3	25	((("5206934"   "5282127"   "5539886"   "5655110"   "5687094"   "5822206"   "6008804"   "6115641"   "6116766"   "6158903"   "6249714"   "6253115"   "6295513"   "6473720"))) and ((display screen User adj interface browser window) with (select\$4 option choice)) and (cad cam cad\$cam) and conver\$5 and format	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 21:47
S14 4	31	((("5206934"   "5282127"   "5539886"   "5655110"   "5687094"   "5822206"   "6008804"   "6115641"   "6116766"   "6158903"   "6249714"   "6253115"   "6295513"   "6473720"))) and ((display screen User adj interface browser window) with (select\$4 option choice)) with (cad cam cad\$cam application program software) and conver\$5 and format	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 21:48
S14 5	0	((("5206934"   "5282127"   "5539886"   "5655110"   "5687094"   "5822206"   "6008804"   "6115641"   "6116766"   "6158903"   "6249714"   "6253115"   "6295513"   "6473720"))) and ((display screen User adj interface browser window) with (select\$4 option choice)) with (cad cam cad\$cam application program software) same conver\$5 same format	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 21:48
S14 6	21547	((display screen User adj interface browser window) with (select\$4 option choice)) with (cad cam cad\$cam application program software) and conver\$5 and format	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 21:50

## EAST Search History

S14 7	553	((display screen User adj interface browser window) with (select\$4 option choice)) with (cad cam cad\$cam application program software) same conver\$5 same format	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 22:03
S14 8	363	S147 and network	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 21:52
S14 9	0	S147 and network and mold	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/31 21:52
S15 0	162	S147 and network	USPAT	OR	ON	2007/01/31 21:54
S15 1	45	S147 same network	USPAT	OR	ON	2007/01/31 21:58
S15 2	1	S147 same network and (cad cam cad\$cam)	USPAT	OR	ON	2007/02/01 12:30
S15 3	50	("5553239" "6052710" "5644718" "6185609" "5566302" "5577251" "5787251" "5920725" "5619650" "5748897" "5802391" "5828843" "5860072" "5889942" "5894556" "5928335" "5944783" "5991535" "6014700" "6049877" "6128660" "6138148" "6141010" "6147687" "6167567" "6182086" "6185617" "6189138" "6229534" "6249794" "5465351" "5675805" "5680605" "5682514" "5692191" "5757925" "5774668" "5818448" "5859971" "5867661" "5878213" "5918039" "6006034" "6006229" "6016394" "6038596" "6041343" "6047356" "6049823" "6058482" ).pn.	USPAT	OR	ON	2007/02/01 12:31

## EAST Search History

S15 4	1	("5553239" "6052710" "5644718" "6185609" "5566302" "5577251" "5787251" "5920725" "5619650" "5748897" "5802391" "5828843" "5860072" "5889942" "5894556" "5928335" "5944783" "5991535" "6014700" "6049877" "6128660" "6138148" "6141010" "6147687" "6167567" "6182086" "6185617" "6189138" "6229534" "6249794" "5465351" "5675805" "5680605" "5682514" "5692191" "5757925" "5774668" "5818448" "5859971" "5867661" "5878213" "5918039" "6006034" "6006229" "6016394" "6038596" "6041343" "6047356" "6049823" "6058482" ).pn. and (cad cam autocad cad\$cam)	USPAT	OR	ON	2007/02/01 20:39
S15 5	58	("5553239" "6052710" "5644718" "6185609" "5566302" "5577251" "5787251" "5920725" "5619650" "5748897" "5802391" "5828843" "5860072" "5889942" "5894556" "5928335" "5944783" "5991535" "6014700" "6049877" "6128660" "6138148" "6141010" "6147687" "6167567" "6182086" "6185617" "6189138" "6229534" "6249794" "5465351" "5675805" "5680605" "5682514" "5692191" "5757925" "5774668" "5818448" "5859971" "5867661" "5878213" "5918039" "6006034" "6006229" "6016394" "6038596" "6041343" "6047356" "6049823" "6058482" ) and (cad cam autocad cad\$cam)	US-PGPUB; USPAT	OR	ON	2007/02/01 17:38
S15 6	8	"6675055"	US-PGPUB; USPAT	OR	OFF	2007/02/01 17:40
S15 7	5	"6741265"	USPAT	OR	ON	2007/02/01 20:40
S15 8	6	"6741265"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 22:01

## EAST Search History

S159	7337	700/179-204.ccls. 700/97 700/98 700/197	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/01 22:02
S160	3	S159 and ((display screen User adj interface browser window) with (select\$4 option choice)) with (cad cam cad\$cam application program software) same conver\$5 same format	US-PGPUB; USPAT; USOCR	OR	ON	2007/02/01 22:03
S161	0	"717"/\$.ccls. and ( mold same conver\$5 same product same design )	USPAT	OR	OFF	2007/09/04 09:37
S162	7573	"717"/\$.ccls.	USPAT	OR	OFF	2007/09/03 22:48
S163	6	S162 and ( mold and conver\$5 and product and design )	USPAT	OR	OFF	2007/09/03 22:49
S164	30	( mold same conver\$5 same product same design )	USPAT	OR	OFF	2007/09/03 22:57
S165	19	( mold same conver\$5 same network same design )	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/09/03 22:58
S166	11	"6,542,937"	USPAT	OR	OFF	2007/09/04 09:37
S167	10	("6542937").URPN.	USPAT	OR	OFF	2007/09/04 09:43
S168	1	"7216005"	USPAT	OR	OFF	2007/09/04 09:43
S169	4044	("700"/\$.ccls. "717"/\$.ccls. "715"/\$.ccls.) and cad\$3	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:44
S170	0	"20020019745" and (standard near form) with intermediate	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:37
S171	0	"20020019745" and (standard near3 form)	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:37
S172	1	"20020019745"	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:37
S173	800	S169 and (data near2 conver\$5)	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:39
S174	0	S169 and (data near2 conver\$5) same cad same server same mold	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:39
S175	10	S169 and (data near2 conver\$5) same cad same server	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:43



## EAST Search History

S17 6	2	S169 and (data near2 conver\$\$) same cad same application same server	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:41
S17 7	10	S169 and (data near2 conver\$\$) same cad\$4 same server	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:43
S17 8	4399	("700"/\$.ccls. "717"/\$.ccls. "715"/\$. ccls.) and cad\$4	US-PGPUB; USPAT	OR	OFF	2007/09/11 15:01
S17 9	11	"6,542,937"	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:52
S18 0	2	09/316863	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:52
S18 1	10	S178 and S177	US-PGPUB; USPAT	OR	OFF	2007/09/11 14:57
S18 2	17	("5966310").URPN.	USPAT	OR	OFF	2007/09/11 14:58
S18 3	22	("700"/\$.ccls. "717"/\$.ccls. "715"/\$. ccls.) and (application near3 server same cad\$4)	US-PGPUB; USPAT	OR	OFF	2007/09/11 17:38
S18 4	8	("5610833"   "5796986"   "6063128"   "6088625"   "6177942"   "6385302"   "6445974"   "RE36602").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/09/11 15:10
S18 5	5	("700"/\$.ccls. "717"/\$.ccls. "715"/\$. ccls.) and (application near3 server same cad\$4) and ((standard uniform universal unified ) near3 format)	US-PGPUB; USPAT	OR	OFF	2007/09/11 15:29
S18 6	6	"710844"	US-PGPUB; USPAT	OR	OFF	2007/09/11 17:38
S18 7	1	"7108044"	US-PGPUB; USPAT	OR	OFF	2007/09/11 17:39
S18 8	17	"mold design data"	US-PGPUB; USPAT	OR	OFF	2007/09/11 17:42
S19 0	45	"mold design" and cad\$4 and (product near design)	US-PGPUB; USPAT	OR	OFF	2007/09/11 17:42
S19 1	20	"mold design" same cad\$4 same (product near design)	US-PGPUB; USPAT	OR	OFF	2007/09/11 18:06
S19 2	3	("5900259").URPN.	USPAT	OR	OFF	2007/09/11 17:50
S19 3	9	S191 and (internet web)	US-PGPUB; USPAT	OR	OFF	2007/09/11 18:07
S19 4	24	"mold design" and cad\$4 and (product near design)	USPAT	OR	OFF	2007/09/11 19:19
S19 5	6	S194 and (internet web)	US-PGPUB; USPAT	OR	OFF	2007/09/11 18:09
S19 6	4	"5,900,259"	US-PGPUB; USPAT	OR	OFF	2007/09/11 18:09

Set	Items	Description
S1	314123	(STYLE? ? OR PRODUCT? OR MODEL? OR FORMAT? OR LAYOUT? OR DESIGN? OR CONSTRUCT??? ? OR CREAT???) (5N) (INFORMATION?? OR DATA OR INFO OR CONTENT? ? OR FILE? ?)
S2	5120	S1(7N) (UPLOAD? OR LOAD OR LOADS OR LOADED OR LOADING OR INSTALL?)
S3	2058957	(SERVER? OR WEBSEVER? OR WEB()SERVER? (APPLICATION? OR APP()SERVER? OR APPLICATION? OR MAINFRAME? OR COMPUTER?)
S4	39363	S1:S2(7N) (CONVERT?? OR CONVERTS OR CONVERTING OR CONVERSION? OR TRANSFORM? OR ALTER??? OR REFORMAT? OR MODIF? OR REVIS?? ? OR CONFORM? OR ORIENT? OR ADAPT? OR CHANG??? ?)
S5	511256	(INTERMEDIA? OR BETWEEN OR INCREMENT? OR MIDDLE? OR HALFWAY OR (HALF OR MID)()WAY OR MIDWAY? OR MEDIAL? OR MEDIAN? OR PART? ? OR PARTIAL?) (5N) (INFORMATION?? OR DATA OR INFO OR CONTENT? ? OR FILE? ? OR S1)
S6	319722	(STANDARD? OR SPECIFIC? OR POLIC? OR CODE? ? OR CONVENTION? OR RULE? ? OR REGULAT? OR UNIFORM?) (5N) (INFORMATION?? OR DATA OR INFO OR CONTENT? ? OR FILE? ? OR S1)
S7	6283	(MOLD??? OR MOULD?) (3N) DESIGN?
S8	3755562	AUTOMAT??? ? OR ENGINEER? OR MANUFACTUR? OR CAD OR COMPUTER(2N) (AIDED OR ASSIST?) (2N) (DESIGN? OR MOLD??? (2N) DESIGN? OR CAM OR CAE) OR CAMD
S9	247	S2 AND S3 AND S4 AND S5:S6
S10	64	S9 AND S7:S8
S11	25	S10 AND AC=US/PR AND AY=(2001:2007)/PR
S12	34	S10 AND AC=US AND AY=2001:2007
S13	28	S10 AND AC=US AND AY=(2001:2007)/PR
S14	54	S10 AND PY=2001:2007
S15	54	S11:S14
S16	10	S10 NOT S15
S17	183	S9 NOT S10
S18	0	S17 AND S7
S19	37	S7 AND S4
S20	37	S19 NOT S10
S21	17	S20 AND S5:S6
S22	20	S20 NOT S21
S23	12	S22 AND S3
S24	2924	S7:S8 AND S4 AND S5:S6
S25	1856	S24 AND S3
S26	49714	S1(7N) (DELIVER? OR SEND??? OR SENT OR DISTRIBUT? OR TRANSFER? OR TRANSMI? OR BEAM???)
S27	465	S25 AND (S2 OR S26)
S28	401	S27 NOT S9
S29	2	S28 AND S7
S30	399	S28 NOT S29
S31	15	S30 AND (CONVER? OR STANDARDI?) (5N) (PRODUCT?(3N) (DATA OR INFORMATION OR INFO))

File 350:Derwent WPIX 1963-2007/UD=200756

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File 347:JAPIO Dec 1976-2007/Mar(Updated 070809)

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16/69,K/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0008274978 - Drawing available  
WPI ACC NO: 1997-383505/199735  
XRPX Acc No: N1997-319321

**Implementation information establishment system e.g. for computer network**  
- has automatic setting device which performs addition/deletion of  
information with reference to edit operation file , thus modifying  
design information contents

Patent Assignee: HITACHI LTD (HITA)

Inventor: INABA J; KIHARA K; MIYAKE S; SAKURAI Y; TEZUKA S

**Patent Family** (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 9168009	A	19970624	JP 1995326811	A	19951215	199735 B
US 5901288*	A	19990504	US 1996761370	A	19961209	199925 E

Priority Applications (no., kind, date): JP 1995326811 A 19951215

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 9168009	A	JA	24	21	

#### Alerting Abstract JP A

The system has a designing device (11) which establishes the design information contents pertinent to an establishment object (51). Edit operation procedures, such as addition/deletion of information in order to make the establishment object reflect the design information are stored in an edit operation file

The edit operation is performed automatically with reference to the edit operation file. An automatic setting device (31) performs addition/deletion of information , thus modifying the design information contents.

**ADVANTAGE** - Prevents termination of setting device in half way establishment state. Performs renewal of information , efficiently. Improves flexibility.

**Title Terms/Index Terms/Additional Words:** IMPLEMENT; INFORMATION; ESTABLISH ; SYSTEM; **COMPUTER** ; NETWORK; **AUTOMATIC** ; SET; DEVICE; PERFORMANCE; ADD ; DELETE; REFERENCE; EDIT; OPERATE; FILE; MODIFIED; DESIGN; CONTENT

#### Class Codes

International Classification (Main): G06F-013/14, H04L-012/24

(Additional/Secondary): G06F-015/177, H04L-012/26

US Classification, Issued: 395200530, 395200430, 395200470, 395200500, 395200510, 395200520, 395200800

File Segment: EPI;

DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-H07C5A; W01-A06A; W01-A06B5C

**Implementation information establishment system e.g. for computer network**  
...

...has automatic setting device which performs addition/deletion of  
information with reference to edit operation file , thus modifying  
design information contents

**Original Titles:**

...Network operating information system having design device and **automatic** setting device.

**Alerting Abstract** ...The edit operation is performed automatically with reference to the edit operation file. An **automatic** setting device (31) performs addition/deletion of **information**, thus **modifying** the **design information contents**.

...  
...ADVANTAGE - Prevents termination of setting device in **half way** establishment state. Performs renewal of **information**, efficiently. Improves flexibility.

**Title Terms**.../Index Terms/Additional Words: **COMPUTER** ; ...

... **AUTOMATIC** ;

**Original Publication Data by Authority**

**Original Abstracts:**

A network operating information setting system includes a design device, an **automatic** setting device and a network device. The design device has the function of producing a command chain of information...

...data from the storage medium in order to display the data thus read out. The **automatic** setting device has the function of reading out the command chain from the storage medium in order to transmit...

...the network operating information to the original information in the network device. In addition, the **automatic** setting device has **both** the function of reading out data from the network device and the function of producing...

**Claims:**

...operating a network, to a network device for managing the network operating information in a **computer** network **having** a plurality of communication apparatuses connected thereto, said system comprising: design means for designing the...

...information which is to be set to said network device, said design means including input **means** for inputting therethrough to **information** for use in **design** by an operator, **conversion** means for **converting the information** inputted **by** the user into the editing operation procedure of producing, deleting or changing the network operating information, and storage means for storing data relating to the editing operation procedure; and **automatic** setting means, connected to said **network** device through a data transmission line and **installed** in a separate apparatus than the **design** means, for reading out the **data** relating to the editing operation **procedure** from said storage means of said design means in order to carry out a network...

16/69,K/5 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0008255820 - Drawing available  
WPI ACC NO: 1997-363220/199733  
XRPX Acc No: N1997-302032

**Vendor-neutral integrated vehicle electrical design and analysis system for computer aided engineering tool - has design manager that assists user in accessing VDB, launches selected CAE tools and initiates VDB translations to enable user to perform vehicle design and analysis with CAE tools**

Patent Assignee: FORD MOTOR CO (FORD)  
Inventor: DEVLIN S S; JOLLIFFE J A J; LOUCH R J; VEDAPUDI M  
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 5646862	A	19970708	US 1994315163	A	19940929	199733 B

Priority Applications (no., kind, date): US 1994315163 A 19940929

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5646862	A	EN	16	14	

#### Alerting Abstract US A

The system includes a Vehicle Database (VDB) operative as a central repository to store all design, analysis, and library information. An interface accesses the VDB and exchanges data with all of the CAB tools. For each tool, an outbound translator is operative to translate the tools internal data structures into a standard interchange format. An inbound VDB translator is operative to load data structures from each of the CAE tools into the VDB. An outbound VDB translator is operative to extract selected design data from the VDB and translate it into the standard interchange format or a tool specific inter-change format.

An inbound translator is operative to translate the standard or tool specific interchange format into the tool's internal data structures. A design manager assists a user in accessing the VDB, launches selected CAE tools and initiates VDB translations to enable the user to perform vehicle design and analysis with the CAE tools. An integration mechanism is operative to invoke and control data flow to and from selected CAE tools so that all of the CAE tools appear to the user as a seamless part of an entire system.

ADVANTAGE - Provides communication between vendor independent tool that do not necessarily speaks same language.

**Title Terms/Index Terms/Additional Words:** VENDING; NEUTRAL; INTEGRATE; VEHICLE; ELECTRIC; DESIGN; ANALYSE; SYSTEM; COMPUTER ; AID; ENGINEERING ; TOOL; MANAGE; ASSIST; USER; ACCESS; LAUNCH; SELECT; CAE; INITIATE; TRANSLATION; ENABLE; PERFORMANCE

#### Class Codes

International Classification (Main): B60R-016/00  
US Classification, Issued: 364488000

File Segment: EngPI; EPI;  
DWPI Class: T01; Q17  
Manual Codes (EPI/S-X): T01-J07C

**Vendor-neutral integrated vehicle electrical design and analysis system for computer aided engineering tool...**

**Alerting Abstract** ...CAB tools. For each tool, an outbound translator is operative to translate the tools internal **data** structures into a **standard** interchange **format**. An inbound VDB translator is operative to **load** data structures from each of the CAE tools into the VDB. An outbound VDB translator...

...An inbound translator is operative to translate the **standard** or tool **specific** interchange **format** into the tool's internal **data** structures. A **design** manager assists a user in accessing the VDB, launches selected CAE tools and initiates VDB...

**Title Terms**.../Index Terms/Additional Words: **COMPUTER** ; ...

... **ENGINEERING** ;

**Original Publication Data by Authority**

**Original Abstracts:**

An integrated Vehicle Electrical Design and analysis System ( **VEDS** ) which is adapted to accommodate **data** **interchanged** **between** multiple **vendor**-independent **Computer Aided Engineering** ( **CAE** ) **tools**. **The system includes** a Vehicle Database (VDB) which is operative as a central repository to store all design...

...CLOS). For each tool, an outbound translator is operative to translate the tool's internal **data** structures into a **standard** interchange **format**. Similarly, **for each tool**, an inbound translator is operative to translate a **standard** or tool **specific** interchange **format** into the tool's internal **data** structures. The VDB **also** includes an inbound and an outbound translator. The inbound translator is operative to load data... of the CAE tools into the VDB. The outbound translator is operative to extract selected **design data** from the **VDB** and translate it into the **standard** interchange format or a tool specific interchange format. A Design Manager and an Integration Mechanism...

**Claims:**

A vendor-neutral integrated vehicle electrical design and **analysis** system **adapted** to **accommodate** **data** interchange **between** multiple **vendor**-independent **Computer Aided Engineering** ( **CAE** ) **tools** which have different internal data structures to provide a user using one of the CAE tools...

...the CAE tools;for each tool, an outbound translator operative to translate the tools internal **data** structures into a standard interchange **format**;an **inbound** VDB translator operative to **load** **data** structures from each of the CAE tools into the VDB;an outbound VDB translator operative to extract selected design data from the VDB and translate it into the **standard** interchange **format** or a tool **specific** interchange **format**;for each tool, an inbound translator operative to translate the standard or tool specific interchange **format** into the tool's internal **data** structures;a **design** manager for **assisting** a **user** in accessing the VDB, launching **selected** CAE tools and initiating **VDB** translations to enable the user to perform vehicle design and analysis with the CAE tools...

...and from selected CAE tools so that all of the CAE tools appear to the **user** as a seamless **part** of an entire system.

16/69,K/7 (Item 7 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0004918633

WPI ACC NO: 1989-306839/198942

**Translating graphics language file to CADAM file - starting utility program to create file and up- loading to CADAM host as ASCII file**

Patent Assignee: ANONYMOUS (ANON)

**Patent Family** (1 patents, 1 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
RD 304043	A	19890810	RD 1989304043	A	19890720	198942 B

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
RD 304043	A	EN	1	0	

#### Alerting Abstract RD A

Many personal **computer** based drawing programmes have the capability to create a Graphics Language (GL) file for IBM and Hewlett Packard type plotters. Nearly all do not have any file output that **Computer Aided Design** and **Manufacturing** (CADAM) programmes can read. A GL file can be converted into a CADAM file by having the drawing programme put the plotter output in a **computer** data file (versus actually plotting it). This is sometimes called a spooled output and it is the GL file itself. This can be recognised by browsing the file to see if there are GL commands like PU and PD in the **file**. The utility programme called DCIMPORT ( **part** of the DESIGNCAD vendor programme package from American Small Business **Computers** ) is started and the option to **convert** Hewlett Packard GL **files** into **DESIGNCAD** **format** and run it is picked.

The utility programme called IGESOUT (again from DESIGNCAD) is started to **create** an IGES **file** from the newly **created** **DESIGNCAD** **file** and the IGES **file** is **uploaded** to the CADAM host as an ASCII file. Finally, the CADAM IGES processor is started to create the CADAM drawing file.

ADVANTAGE - Only limitations are due to number of vectors/lines in original file itself.

**Title Terms/Index Terms/Additional Words:** TRANSLATION; GRAPHIC; LANGUAGE; FILE; START; UTILISE; PROGRAM; UP; LOAD; HOST; ASCII; CAD ; COMPUTER ; AID; DESIGN; **MANUFACTURE**

#### Class Codes

(Additional/Secondary): G06F-000/01

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J; T01-J15

**...starting utility program to create file and up- loading to CADAM host as ASCII file**

**Alerting Abstract** ...Many personal **computer** based drawing programmes have the capability to create a Graphics Language (GL) file for IBM and Hewlett Packard type plotters. Nearly all do not have any file output that **Computer Aided Design** and **Manufacturing** (CADAM) programmes can read. A GL file can be converted into a CADAM file by having the drawing programme put the plotter output in a **computer** data file (versus actually plotting it). This is sometimes called a spooled output and it...

...the file to see if there are GL commands like PU and PD in the file .  
The utility programme called DCIMPORT ( part of the DESIGNCAD vendor  
programme package from American Small Business Computers ) is started and  
the option to convert Hewlett Packard GL files into DESIGNCAD format  
(and run it is picked...)

...The utility programme called IGESOUT (again from DESIGNCAD) is started  
to create an IGES file from the newly created DESIGNCAD file and  
the IGES file is uploaded to the CADAM host as an ASCII file. Finally,  
the CADAM IGES processor is started...

Title Terms.../Index Terms/Additional Words: CAD ; ...

... COMPUTER ; ...

... MANUFACTURE



16/9/8 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
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04910908 \*\*Image available\*\*  
INPUTTING METHOD FOR INSTALLATION DATA

PUB. NO.: 07-203508 [JP 7203508 A]  
PUBLISHED: August 04, 1995 (19950804)  
INVENTOR(s): YAMAMOTO YUJI  
APPLICANT(s): MEISEI ELECTRIC CO LTD [351295] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 06-000835 [JP 94835]  
FILED: January 10, 1994 (19940110)  
INTL CLASS: [6] H04Q-003/58; H04M-003/00; H04Q-003/545  
JAPIO CLASS: 44.4 (COMMUNICATION -- Telephone)  
JAPIO KEYWORD: R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessors)

#### ABSTRACT

PURPOSE: To accurately input installation data, which is normally installed for a telephone exchange system, in a new telephone exchange system in a short time.

CONSTITUTION: First, an old main device 1 and a personal computer 3 are connected so as to send the sending command signal of installation data to the central control part 102 of the old main device 1 by the operation of the personal computer 3. Thereby, the central control part 102 reads installation data from an installation data storage part 101 to send to the personal computer 3 and the central control part 302 of the personal computer 3 receives sent installation data and temporarily stores it in a disk. Next, at the time of connecting the personal computer 3 and a new main device 4 and executing the sending operation of installation data, sent installation data is converted so as to be suited to the format of an installation data storage part (401,) sent to a central control part 402 and stored in the installation data storage part 401. The reduction of the inputting time and the accurate input operation of installation data are attained by automating the reading, the conversion and the writing of installation data at the time of updating a key telephone system like this.

16/9/9 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
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04518136 \*\*Image available\*\*  
PRODUCT INFORMATION MANAGEMENT SYSTEM

PUB. NO.: 06-162036 [JP 6162036 A]  
PUBLISHED: June 10, 1994 (19940610)  
INVENTOR(s): SUDO KOJI

SHUKUTANI MASAO  
OKUYAMA KATSUO  
ISHIWATARI MASAOKI  
UCHIBORI HIDETOSHI  
MATSUI TOSHIARI  
KUBO SHIGERU  
MATSUBAYASHI AKINORI  
TOYODA KAZUhide  
TAKEI EIKO

APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP  
(Japan)

FUJITSU COMMUN SYST LTD [470927] (A Japanese Company or  
Corporation), JP (Japan)

APPL. NO.: 03-057371 [JP 9157371]

FILED: March 20, 1991 (19910320)

INTL CLASS: [5] G06F-015/21; B23P-021/00; G06F-015/60

JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- **Computer Applications** );  
25.2 (MACHINE TOOLS -- Cutting & Grinding)

JAPIO KEYWORD: R060 (MACHINERY -- **Automatic Design**)

JOURNAL: Section: P, Section No. 1799, Vol. 18, No. 489, Pg. 87,  
September 12, 1994 (19940912)

#### ABSTRACT

PURPOSE: To unify details of the **product loaded contents** from an equipment mounting **design** to **manufacture**, inspection and shipment by preparing an apparatus mounting file corresponding to an order by using a design data file and a design know-how data file in each separate customer order unit.

CONSTITUTION: An equipment mounting design part 10 executes functions of an arrangement design of the equipment and the check of each design condition, etc., based on order information of a customer order file 13a and an estimate in accordance with a request of a design of a conversational format in a terminal equipment 2. In this case, a **design data file** 13b and design know-how file 13c are used, and an equipment mounting change file 14a is prepared. Also, when the contents of the **design data file** 13b are changed, a **design change/version number file** 14b is prepared, based on **design change information**, in a **design change information** managing part 11a and a **design version number information** managing part 11b of a **design change managing part** 11. Subsequently, from this **information**, basic information of a version number unit of an electronic circuit printed board is prepared in a PKG basic information file 14c.

21/69,K/13 (Item 13 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2007 The Thomson Corporation. All rts. reserv.

0010402330

WPI ACC NO: 2000-687010/200067

XRAM Acc No: C2000-208946

**Injection moulding tool manufacture, using 3D CAD to obtain a negative converted into a prototype using a stereolithographic machine**

Patent Assignee: CONDES A (COND-I); CONDES A I (COND-I); CONDES CONDES A (COND-I)

Inventor: CONDES C A; CONDES CONDES A

**Patent Family** (8 patents, 79 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
WO 2000061346	A1	20001019	WO 1999ES234	A	19990722	200067	B
ES 2151451	A1	20001216	ES 1999760	A	19990413	200103	E
EP 1112828	A1	20010704	EP 1999931265	A	19990722	200138	E
			WO 1999ES234	A	19990722		
ES 2151451	B1	20010701	ES 1999760	A	19990413	200148	E
US 20020112339	A1	20020822	US 2001780483	A	20010212	200262	NCE
EP 1112828	B1	20041006	EP 1999931265	A	19990722	200466	E
			WO 1999ES234	A	19990722		
DE 69920936	E	20041111	DE 69920936	A	19990722	200474	E
			EP 1999931265	A	19990722		
			WO 1999ES234	A	19990722		
DE 69920936	T2	20060223	DE 69920936	A	19990722	200615	E
			EP 1999931265	A	19990722		
			WO 1999ES234	A	19990722		

Priority Applications (no., kind, date): US 2001780483 A 20010212; ES 1999760 A 19990413

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000061346	A1	ES	14	0	
National Designated States,Original: AL AM AZ BA BB BG BR BY CA CN CU CZ EE GE GH GM HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LV MD MG MK MN MW MX NO NZ PL RO RU SD SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW					
EP 1112828	A1	EN			PCT Application WO 1999ES234 Based on OPI patent WO 2000061346
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
EP 1112828	B1	EN			PCT Application WO 1999ES234 Based on OPI patent WO 2000061346
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
DE 69920936	E	DE			Application EP 1999931265 PCT Application WO 1999ES234 Based on OPI patent EP 1112828 Based on OPI patent WO 2000061346
DE 69920936	T2	DE			Application EP 1999931265 PCT Application WO 1999ES234 Based on OPI patent EP 1112828 Based on OPI patent WO 2000061346

#### Alerting Abstract WO A1

NOVELTY - Partition lines for inserts are added to a 3D-CAD drawing of the mould drawing, and the resulting negative is converted into an STL file

to allow a prototype of the negative to be made using a stereolithographic machine.

**DESCRIPTION** - A method for making injection-moulding tools for plastic materials, comprises **designing** the **mould** geometry by 3D-CAD and then adding the partition lines to obtain the inserts for use in the mould, in order to obtain a negative of the insert in 3D-CAD. The negative is converted into an STL file so that a negative prototype can be constructed using a stereolithographic machine, the prototype finally being refined and polished.

**USE** - None given.

**ADVANTAGE** - Good quality tools are made with high tolerances and without shavings using a relatively quick method.

#### **Technology Focus**

**POLYMERS** - The male mould tools are made from a photocurable resin material using a laser beam. The insert comprises a copper or nickel material, made by electrodeposition or galvanic plating, the thickness of the metal depending on the dwell time in the coating bath. The insert cavity is filled with iron, aluminium, copper, bronze or epoxy resin in order to form a solid insert having central bores.

#### **Extension Abstract**

**EXAMPLE** - None given.

**Title Terms/Index Terms/Additional Words:** INJECTION; MOULD; TOOL; MANUFACTURE; CAD; OBTAIN; NEGATIVE; CONVERT; PROTOTYPE; MACHINE

#### **Class Codes**

International Classification (Main): B23P-017/00, B29C-033/38

(Additional/Secondary): B29C-033/40

International Classification (+ Attributes)

IPC + Level Value Position Status Version

B29C-0033/38 A I F 20060101

B29C-0033/40 A I L 20060101

US Classification, Issued: 029527500

File Segment: CPI; EngPI

DWPI Class: A35; M11; P56

Manual Codes (CPI/A-M): A11-B12B; A11-B16; A11-C02D; A12-H05; M11-A

#### **Polymer Indexing**

<01>

\*001\* 018; P0000

\*002\* 018; ND05; J9999 J2915-R; N9999 N6484-R N6440; J9999 J2948 J2915; J9999 J2904

<02>

\*001\* 018; P0000; S9999 S1434

\*002\* 018; ND01; K9790-R; B9999 B4988-R B4977 B4740; Q9999 Q7932 Q7885; J9999 J2904; K9858 K9847 K9790; N9999 N7307 N6440

<03>

\*001\* 018; P0464-R D01 D22 D42 F47

\*002\* 018; ND01; Q9999 Q7932 Q7885; J9999 J2904

**Alerting Abstract** **DESCRIPTION** - A method for making injection-moulding tools for plastic materials, comprises **designing** the **mould** geometry by 3D-CAD and then adding the partition lines to obtain the inserts for...

#### **Original Publication Data by Authority**

**Claims:**

...lines are added thereby obtaining the inserts which are going to be employed in the **mould** , the **designs** being **done** in three dimensions and once the CAD insert is obtained, a negative insert, also in...

...Method for manufacturing moulds suitable for plastic injection moulding capable of producing several prototype plastic **parts** , using computer aided **design** **<b>characterised** in that</b> it is constituted starting from a geometry desgined by CAD, to hich parting...

...produce said prototype parts, the design being done in three dimensions and once the CAD **mould** portions are obtained, **negative** **mould** portions are created, also in CAD, which are then **converted** into a STL file in order **to** make the negative mould portions in **a** stereolithographic machine, then **the** **parts** **created** by the stereolithographic machine as the negative mould portions being finished and polished...

...lines are added thereby obtaining the inserts which are going to be employed in the **mould** , the **designs** being done in three dimensions and once the CAD insert is obtained, a negative insert, also in cad, is built, which is then **converted** into **a** STL **file** for the negative of the prototype to be built in a stereolithographic machine, then the...

21/69,K/14 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0007388547

WPI ACC NO: 1995-336559/199543

Related WPI Acc No: 1998-017862

XRAM Acc No: C1995-148412

XRPX Acc No: N1995-252373

**Prodn. tooth mould by scanning surface of model - processing surface information in computer to give tooth path programme used to control mould milling**

Patent Assignee: DENTSPLY INT INC (DENX); DENTSPLY RES & DEV CORP (DENX)

Inventor: ANDREW; BARRY; CARLTON; DEHOFF B D; GRIM C L; JEFFREY; LIU A T;

LIU A T C; MCGRAW J E

**Patent Family** (10 patents, 9 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5452219	A	19950919	US 1990536137	A	19900611	199543	B
			US 1994219804	A	19940329		
EP 756852	A1	19970205	EP 1995112312	A	19950804	199711	NCE
JP 9056731	A	19970304	JP 1995209568	A	19950817	199719	NCE
CA 2155276	A	19970204	CA 2155276	A	19950803	199723	NCE
BR 199503779	A	19970916	BR 19953779	A	19950823	199744	NCE
CN 1144645	A	19970312	CN 1995116212	A	19950904	200103	NCE
EP 756852	B1	20020508	EP 1995112312	A	19950804	200231	NCE
DE 69526654	E	20020613	DE 69526654	A	19950804	200246	NCE
			EP 1995112312	A	19950804		
CN 1099864	C	20030129	CN 1995116212	A	19950904	200534	NCE
CA 2155276	C	20051101	CA 2155276	A	19950803	200576	NCE

Priority Applications (no., kind, date): CN 1995116212 A 19950904; BR 19953779 A 19950823; JP 1995209568 A 19950817; DE 69526654 A 19950804; EP 1995112312 A 19950804; CA 2155276 A 19950803; US 1990536137 A 19900611; US 1994219804 A 19940329

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5452219	A	EN	9	1	Continuation of application US 1990536137
EP 756852	A1	EN	9	1	
Regional Designated States,Original: CH DE GB IT LI					
JP 9056731	A	JA	9	1	
CA 2155276	A	EN			
BR 199503779	A	PT			
EP 756852	B1	EN			
Regional Designated States,Original: CH DE GB IT LI					
DE 69526654	E	DE			Application EP 1995112312
					Based on OPI patent EP 756852
CA 2155276	C	EN			

#### Alerting Abstract US A

False teeth each have a moulded coating and high definition labial striations. Each is made by providing a tooth model which is scanned and the resulting reflections received and translated into electronic signals. These are converted into data which is edited to add high definition labial striations using a design programme. A tooth mould part is fabricated using the edited data to direct a milling machine. The machine has at least two mills, the first being used to make a first pass over the mould part and the second a second pass. The second mill end is smaller than the

first. Further mould parts are formed to create a set of high definition false teeth.

USE - To mfr. a tooth mould used for the mfr. of false teeth.

ADVANTAGE - The mould produces false teeth with high definition qualities. The mould is made faster and more cheaply than previously and without the skills of a specialist worker.

**Title Terms/Index Terms/Additional Words:** PRODUCE; TOOTH; MOULD; SCAN; SURFACE; MODEL; PROCESS; INFORMATION; COMPUTER; PATH; PROGRAMME; CONTROL; MILL

#### **Class Codes**

International Classification (Main): A61C-013/00, A61C-013/08, A61C-013/34, A61C-003/00, A61C-005/10, G06F-019/00

(Additional/Secondary): B23Q-015/00, G05B-019/4099, G06T-001/00

US Classification, Issued: 364474050, 364413280, 364474240, 364476000, 433223000

File Segment: CPI; EngPI; EPI

DWPI Class: A96; D21; T01; T06; P32; P56

Manual Codes (EPI/S-X): T01-J07; T01-J15X; T06-A04; T06-A07

Manual Codes (CPI/A-M): D08-A03

**Alerting Abstract** ...are converted into data which is edited to add high definition labial striations using a **design** programme. A tooth **mould part** is fabricated using the **edited data** to direct a milling machine. The machine has at least two mills, the first being...

#### **Documentation Abstract**

...are converted into data which is edited to add high definition labial striations using a **design** programme. A tooth **mould part** is fabricated using the edited **data** to direct a milling machine. The machine has at least two mills, the first being...

#### **Original Publication Data by Authority**

#### **Claims:**

...energy from said tooth model (14), (3) translating said reflections into electronic signals, and (4) **converting** said electronic signals into **data** of the three-dimensional surface locations on said tooth model (14), (b) processing said data, said...

...a three-dimensional surface pattern (26) of said tooth model (14), (4) evaluating said surface **pattern** of said tooth **model** (14) by visually analyzing the surface pattern for high-definitional qualities, and creating a new three-...of said tooth model, said edited data being representative of the surface of said dental **artificial** teeth, said **edited data** being adapted by said milling program to direct said milling along said tool path and repeatedly m...

23/69,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0015301716 - Drawing available  
WPI ACC NO: 2005-651896/200567  
Related WPI Acc No: 1999-341085  
XRAM Acc No: C2005-196851  
XRPX Acc No: N2005-533985

**Unit design system of metallic mold , specifies change in size of unit components such as runner, gate and spool into basic structure of metallic mold, before integrating unit components into basic structure of metallic mold**

Patent Assignee: PUNCH KOGYO KK (PUNC-N)  
Inventor: MORIKUBO Y; TAKAO H

**Patent Family** (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 2005238855	A	20050908	JP 1997292899	A	19971024	200567 B
			JP 2005134916	A	20050506	

*Date? Relevance?*

Priority Applications (no., kind, date): JP 1997292899 A 19971024; JP 2005134916 A 20050506

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 2005238855	A	JA	103	39	Division of application JP 1997292899

#### Alerting Abstract JP A

NOVELTY - A basic structure of a metallic mold is designed based on a pre-stored computer aided design (CAD) data . The change in the size of the unit components such as runner, spool and gate in the basic structure are specified and are replaced in a display. The design of the other processing elements are directly drawn into the basic structure. The design of the basic structure and of the unit components are integrated to design the metallic mold .

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.manufacturing method of metallic mold for resin molding; and
- 2.manufacturing method of metallic mold for die casting.

USE - For designing metallic mold used for molding resin molded article and die-cast products.

ADVANTAGE - Enables simple designing of the metallic mold in short time, by integrating the design of the unit components into basic structure.

DESCRIPTION OF DRAWINGS - The figure shows the perspective view of different bolt and nut.

**Title Terms/Index Terms/Additional Words:** UNIT; DESIGN; SYSTEM; METALLIC; MOULD; SPECIFIED; CHANGE; SIZE; COMPONENT; RUNNER; GATE; SPOOL; BASIC; STRUCTURE; INTEGRATE

#### Class Codes

International Classification (Main): B29C-033/38  
(Additional/Secondary): B29C-045/76

File Segment: CPI; EPI



DWPI Class: A32; T01; T06; X25  
Manual Codes (EPI/S-X): T01-J15X; T06-A04A4; T06-D06; X25-A01; X25-A06  
Manual Codes (CPI/A-M): A11-B01

#### **Polymer Indexing**

<01>

\*001\* 2004; P0000; S9999 S1434

\*002\* 2004; J9999 J6440-R J2915; K9416; N9999 N5743; ND05

**Unit design system of metallic mold , specifies change in size of unit components such as runner, gate and spool into basic...**

**Alerting Abstract ...NOVELTY** - A basic structure of a metallic mold is designed based on a pre-stored computer aided design (CAD) data . The change in the size of the unit components such as runner, spool and gate in the...

...structure. The design of the basic structure and of the unit components are integrated to design the metallic mold . ...USE - For designing metallic mold used for molding resin molded article and die-cast products...

...ADVANTAGE - Enables simple designing of the metallic mold in short time, by integrating the design of the unit components into basic structure...

23/69,K/4 (Item 4 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0012412370 - Drawing available  
WPI ACC NO: 2002-356720/200239  
XRPX Acc No: N2002-280483

**Internet based metal die design data conversion for injection molding applications , involves converting primary design data received from client, into secondary data of different format at server**

Patent Assignee: JOHO SHORI SHINKO JIGYO KYOKAI (JOHO-N); NISSEI JUSHI KOGYO KK - (NSSK)

Inventor: HOSHINA M

**Patent Family** (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 2002056032	A	20020220	JP 2000245241	A	20000811	200239 B

Priority Applications (no., kind, date): JP 2000245241 A 20000811

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 2002056032	A	JA	9	7	

#### Alerting Abstract JP A

NOVELTY - Primary data relating to product design transmitted from the client through Internet, is uploaded at the server . The primary data is converted into secondary data of different format . After the conversion is finalized, the secondary data is preserved for downloading by the client.

USE - For converting metal die design data uploaded from client through Internet, into format which can be downloaded by client, for injection molding applications such as molding of products for electrical equipment, motor vehicles, etc.

ADVANTAGE - Expensive conversion software is not required by the client, hence reducing designing costs. Rapid and accurate designing can be performed.

DESCRIPTION OF DRAWINGS - The figure shows a flowchart explaining the process of converting the design data . (Drawing includes non-English language text).

**Title Terms/Index Terms/Additional Words:** BASED; METAL; DIE; DESIGN; DATA; CONVERT; INJECTION; MOULD; APPLY; PRIMARY; RECEIVE; CLIENT; SECONDARY; FORMAT; SERVE

#### Class Codes

International Classification (Main): G06F-017/50

(Additional/Secondary): B29C-033/00, B29C-045/26, G06F-012/00, G06F-017/60

File Segment: EPI;

DWPI Class: T01; X25

Manual Codes (EPI/S-X): T01-N01D; X25-A06

**Internet based metal die design data conversion for injection molding applications , involves converting primary design data received from client, into secondary data of different format at server**

#### Original Titles:

SERVICE METHOD FOR CONVERTING DATA FOR METALLIC MOLD DESIGN

**Alerting Abstract ...NOVELTY** - Primary data relating to product design transmitted from the client through Internet, is uploaded at the server . The primary data is converted into secondary data of different format . After the conversion is finalized, the secondary data is preserved for downloading by the client.**USE** - For converting metal die design data uploaded from client through Internet, into format which can be downloaded by client, for injection molding applications such as molding of products for electrical equipment, motor vehicles, etc...  
**...DESCRIPTION OF DRAWINGS** - The figure shows a flowchart explaining the process of converting the design data . (Drawing includes non-English language text).

23/69,K/6 (Item 6 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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0011224397 - Drawing available  
WPI ACC NO: 2002-163663/200221  
XRPX Acc No: N2002-124941

**Parameter editing method for networked computer -aided design  
three-dimensional modeling system has server with database for recording  
updates to design parameters**

Patent Assignee: FUKI N (FUKI-I); NIPPONDENSO CO LTD (NPDE)  
Inventor: FUKI N

**Patent Family** (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20010055013	A1	20011227	US 2001858636	A	20010517	200221 B
JP 2001357088	A	20011226	JP 2000181044	A	20000616	200221 E

Priority Applications (no., kind, date): (JP 2000181044 A 20000616)

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20010055013	A1	EN	18	9	
JP 2001357088	A	JA	11		

#### Alerting Abstract US A1

NOVELTY - The system has functions to change the parameters of a three-dimensional model (3D) designed by the CAD system (10). Different designers (30) can amend the models and any amendments to parameters and shape data are recorded in a **server** (20) database. When the 3D model is read from the **server**, the shape information and parameter data of the model are read out together with the various parameter information added.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1.A method for designers to edit parameters for 3D modeling.

2.A computer program for 3D modeling.

USE - For use in CAD systems connected over a network.

ADVANTAGE - The parameters can be freely edited to improve the convenience in the three-dimensional model design. After changing the **design** or **making** the **mold** model **from** the **design** model, it is possible to **perform** the editions to change, delete and add the items of the parameters.

DESCRIPTION OF DRAWINGS - The block diagram represents a 3D CAD system.

10 CAD system

20 **Server**

30 Partner CAD

**Title Terms/Index Terms/Additional Words:** PARAMETER; EDIT; METHOD;

COMPUTER ; AID; DESIGN; THREE; DIMENSION; SYSTEM; SERVE; DATABASE; RECORD  
; UPDATE

#### Class Codes

International Classification (Main): G06F-017/50, G06T-015/00

US Classification, Issued: 345419000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B4M; T01-J10C4; T01-J15; T01-N01D1B;

T01-N02A3C; T01-S03

? Not Sure  
about the  
date

Parameter editing method for networked computer -aided design  
three-dimensional modeling system has server with database for recording  
updates to design parameters

**Alerting Abstract** ...amend the models and any amendments to parameters  
and shape data are recorded in a **server** (20) database. When the 3D model  
is read from the **server**, the shape information and parameter data of the  
model are read out together with the...

...A method for designers to edit parameters for 3D modeling. A **computer**  
program for 3D modeling .

....

...freely edited to improve the convenience in the three-dimensional model  
design. After changing the **design** or **making** the **mold** model **from** the  
**design** model, it is possible to **perform** the editions to change,  
delete and add the items of the parameters...

...20 **Server**

**Title Terms...**/Index Terms/Additional Words: **COMPUTER ;**

**Original Publication Data by Authority**

**Original Abstracts:**

...conveniences in a three-dimensional model design, a three-dimensional  
model is read from a **server**, and there are **displayed** (at Steps <b>101  
</b>to <b>103</b>) on that three-dimensional model the parameter  
information (i.e...

...items are deleted (at Step <b>108</b>) wholly or partially. Moreover,  
the parameter list in the **server** is displayed, and the parameter items  
necessary at this **time** are selected from the list. After this, the  
editions of the parameter items are executed...

...After this, the items of the parameters added at this time are  
registered in the **server** (at Steps <b>113 </b>and <b>114</b>), if they  
are not registered yet in the **server**. >

**Claims:**

What is claimed is<b>1</b>. A three-dimensional modeling system having a  
**computer** portion enabling a parametric function to **change** a **shape** of a  
three-dimensional **model** by **designer** 's **changing** parameter **information**  
belonging to the three- dimensional **model**, characterized in that  
:the parameter **information**, which are **composed** of parameter items and  
**data** of the respective parameter items, are stored in the **computer**  
portion, wherein both the parameter items and the data are **read** out from  
the **computer** portion and are edited to **change** the parameter  
**information** by the **designer**.>

23/69,K/7 (Item 7 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0011090751 - Drawing available  
WPI ACC NO: 2002-026328/200203  
XRPX Acc No: N2002-020265

**Profiling method for a substrate as a prosthesis for a structural defect in a patient converting CT scan of defective region of patient into 3-dimensional digital model closely matched to patient's profile for natural fitting prosthesis**

Patent Assignee: LOH K W L (LOHK-I); NANYANG POLYTECHNIC (NANY-N); ONG T E H (ONGT-I)

Inventor: HOO T O E; LEONARD L K W; LOH K W L; ONG E H T; ONG T E H

**Patent Family** (5 patents, 93 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2001085040	A1	20011115	WO 2001SG45	A	20010323	200203 B
AU 200142995	A	20011120	AU 200142995	A	20010323	200219 E
SG 92703	A1	20021119	SG 20002474	A	20000510	200303 E
US 20030109784	A1	20030612	WO 2001SG45	A	20010323	200340 E
			US 2002275144	A	20021101	
AU 2001242995	B2	20040311	AU 2001242995	A	20010323	200454 E

Priority Applications (no., kind, date): SG 20002474 A 20000510

**Patent Details**

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001085040	A1	EN	32	7	
National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States, Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200142995	A	EN			Based on OPI patent WO 2001085040
SG 92703	A1	EN			
US 20030109784	A1	EN			PCT Application WO 2001SG45
AU 2001242995	B2	EN			Previously issued patent AU 2001242995

Based on OPI patent WO 2001085040

**Alerting Abstract** WO A1

NOVELTY - The method involves obtaining a CT scan of a patient in the region around a defect. The CT scan data of the defective region is converted into a 3-dimensional digital model. A defective region prototype is fabricated using the 3-dimensional digital model. A 3-dimensional digital replacement is created of the defect. A set of profiling tools is fabricated. A substrate is pressed with the profiling tools to form the prosthesis.

USE - For medical prosthesis production.

ADVANTAGE - Use of **computer** aided design improves quality of prosthesis's produced.

DESCRIPTION OF DRAWINGS - The figure shows the invention.

**Title Terms/Index Terms/Additional Words:** PROFILE; METHOD; SUBSTRATE; PROSTHESIS; STRUCTURE; DEFECT; PATIENT; CONVERT; CT; SCAN; REGION; DIMENSION; DIGITAL; MODEL; CLOSELY; MATCH; NATURAL; FIT

**Class Codes**

International Classification (Main): A61B-017/56, A61B-005/05  
(Additional/Secondary): A61F-002/02  
US Classification, Issued: 600427000

File Segment: EngPI; EPI;

DWPI Class: S05; T01; P31; P32

Manual Codes (EPI/S-X): S05-F; T01-J06A; T01-J10C4B; T01-J15

**Alerting Abstract** ...ADVANTAGE - Use of **computer** aided design improves quality of prosthesis's produced...

**Original Publication Data by Authority****Original Abstracts:**

...the prescribed shape. The punch and cavity of the mould contains a profile that is **computer** generated and designed to closely match the patient's profile and to give the most natural and fitting prosthesis...

...the prescribed shape. The punch and cavity of the mould contains a profile that is **computer** generated and **designed** to closely match the patient's profile and to give the most natural and fitting prosthesis. The present method uses a...

...prothese permettant de corriger un defect chez un patient, ce qui consiste a mettre en **application** une technique de moulage par pression, de maniere a obtenir la forme desiree d'une prothese par pression entre un poincon et une cavite de moule. Le poincon et...

**Claims:**

...the region around said structural defect; b) converting said CT scan data of said defective **region** into a 3- **dimensional** digital **model** of said defective region; c) fabricating a defective region prototype using said 3-dimensional digital...

23/69,K/8 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0010717537 - Drawing available  
WPI ACC NO: 2001-328458/200134  
XRPX Acc No: N2001-236373

**Method of designing die molding process product geometric shapes involves determining draft angles of basic figures sides and displacement vectors of side ends**

Patent Assignee: NEDERLANDSE ORG TOEGEPAST (NEDE)

Inventor: KNOPPERS G E; VAN DEN HOUT J

**Patent Family** (5 patents, 93 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2001027881	A2	20010419	WO 2000NL735	A	20001013	200134 B
NL 1013282	C2	20010417	NL 1013282	A	19991013	200134 E
AU 200111788	A	20010423	AU 200111788	A	20001013	200147 E
EP 1224623	A2	20020724	EP 2000973259	A	20001013	200256 E
			WO 2000NL735	A	20001013	
JP 2003511282	W	20030325	WO 2000NL735	A	20001013	200330 E
			JP 2001530822	A	20001013	

Priority Applications (no., kind, date): NL 1013282 A 19991013

**Patent Details**

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2001027881	A2	EN	18	7	
National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
AU 200111788	A	EN			Based on OPI patent WO 2001027881
EP 1224623	A2	EN			PCT Application WO 2000NL735
					Based on OPI patent WO 2001027881
Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL RO SI					
JP 2003511282	W	JA	28		PCT Application WO 2000NL735
					Based on OPI patent WO 2001027881

**Alerting Abstract** WO A2

NOVELTY - Method consists in determining the draft angles of separate sides of the basic figures and determining the displacement vectors of the ends of those sides. STL files are converted into data files for product forms corrected for draft angles.

DESCRIPTION - There are INDEPENDENT CLAIMS for (1) a computer program for converting STL files into files for a model corrected for draft angles, (2) a computer program for designing geometric shapes described in STL of products to be manufactured in a die molding process and (3) a CAD-CAM computer system.

USE - For designing geometric shapes of products for manufacture in a die molding process.

ADVANTAGE - Method enables simple provision of draft angles in structural triangulation language files before a model enters the CAM path, so that the products have a shape enabling them to be easily removed from the dies during manufacture.

DESCRIPTION OF DRAWINGS - The figure shows an illustration of rendering line section release.



**Title Terms/Index Terms/Additional Words:** METHOD; DESIGN; DIE; PROCESS;  
PRODUCT; GEOMETRY; SHAPE; DETERMINE; DRAFT; ANGLE; BASIC; FIGURE; SIDE;  
DISPLACEMENT; VECTOR; END

**Class Codes**

International Classification (Main): B29C-045/26, G06T-017/00

(Additional/Secondary): B21J-013/02, B29C-045/76, G06F-017/50

File Segment: EngPI; EPI;

DWPI Class: T01; T06; X25; P52

Manual Codes (EPI/S-X): T01-D02; T01-J10C2; T01-J15X; T01-S02; T06-A04A4;  
X25-A01

**Method of designing die molding process product geometric shapes involves determining draft angles of basic figures sides and displacement vectors...**

**Original Titles:**

...METHOD AND **COMPUTER** PROGRAM FOR DESIGNING GEOMETRIC SHAPES DESCRIBED BY MEANS OF TRIANGLES, OF PRODUCTS TO BE MANUFACTURED...

**Alerting Abstract** ...figures and determining the displacement vectors of the ends of those sides. (STL files are converted into data files for product forms corrected for draft angles. DESCRIPTION - There are INDEPENDENT CLAIMS for (1) a computer program for converting STL files into files for a model corrected for draft angles, (2) a computer program for designing geometric shapes described in STL of products to be manufactured in a die molding process and (3) a CAD-CAM computer system ...

**Original Publication Data by Authority**

**Original Abstracts:**

...In a method for designing geometric shapes of products to be manufactured in a die molding process, which geometric shapes are described by means of multiangular basic figures, in particular triangles ...

23/69,K/9 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0010196212

WPI ACC NO: 2000-506425/200046

XRPX Acc No: N2000-374427

**Five-metric 3D digitalizer**

Patent Assignee: DAI L (DAIL-I)

Inventor: DAI L

**Patent Family** (1 patents, 1 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update	
CN 1255662	A	20000607	CN 1998125156	A	19981130	200046	B

Priority Applications (no., kind, date): CN 1998125156 A 19981130

**Patent Details**

Number	Kind	Lan	Pg	Dwg	Filing Notes
CN 1255662	A	ZH		0	

**Alerting Abstract** CN A

A digitalizer used for **computer** simulation **design** of 3D solid **moulding** , which can be used for CAD, **computer** -aided 3D animation design and virtual reality, can be used to acquire the shape information of actual object in real space, digitalize it, directly input it to **computer** . After said digitalized information is processed, it is **transformed** into a universal **formatted** **file** of 3D solid moulding, which can be used by other **computer** **applications** .

**Title Terms/Index Terms/Additional Words:** FIVE; METRIC

**Class Codes**

International Classification (Main): G06F-003/00

File Segment: EPI;

DWPI Class: T01; T04

Manual Codes (EPI/S-X): T01-J10A; T01-J10C4; T04-M

**Alerting Abstract** ...A digitalizer used for **computer** simulation **design** of 3D solid **moulding** , which can be used for CAD, **computer** -aided 3D animation design and virtual reality, can be used to acquire the shape information of actual object in real space, digitalize it, directly input it to **computer** . After said digitalized information is processed, it is **transformed** into a universal **formatted** **file** of 3D solid moulding, which can be used by other **computer** **applications** .

23/69,K/10 (Item 10 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0009509092  
WPI ACC NO: 1999-452235/199938  
XRAM Acc No: C1999-132827  
XRPX Acc No: N1999-338579

Designing method of metallic mold using computerised system -  
involves subtraction of product solid with integrated thin film solid from  
metallic mold to form cavity and core parts

Patent Assignee: SANYO ELECTRIC CO LTD (SAOL)

Inventor: MATSUMOTO T

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 11188736	A	19990713	JP 1997322828	A	19971125	199938 B
US 6233499	B1	20010515	US 199897821	A	19980616	200129 E
JP 3306359	B2	20020724	JP 1997322828	A	19971125	200255 E

Priority Applications (no., kind, date): JP 1997322828 A 19971125; JP  
1997234440 A 19970829; JP 1997289883 A 19971022

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 11188736	A	JA	14	24	
JP 3306359	B2	JA	15		Previously issued patent JP 11188736

#### Alerting Abstract JP A

NOVELTY - A solid product (A) is integrated with thin film solids (B1,B2), of predetermined thickness (t), and then the integrated product is subtracted from a metallic mold, by which a cavity and core molds are formed.

DETAILED DESCRIPTION - The thin film solid is added to the product solid for a metallic mold cavity, parting plane of core, bushing part of metallic mold or solid product holes. The thickness of the thin film solid, is set at a level in which fused resin does not flow. When using a metallic mold with holes, the product solid is integrated with the hole solid and subtracted from the molding block. The piece solid is added to the hole solid, for dividing along the molding cavity, and a hole solid is formed to the deformation part, bushing part, slide core part and pin parts of a metallic mold. The metallic mold block solid is a rectangular parallelogram.

An INDEPENDENT CLAIM is also included for a computer -aided design (CAD) apparatus for metallic products, in which recording media for carrying out various programs of metallic mold formation are included.

USE - For metallic mold designing with CAD systems.

ADVANTAGE - Design time is shortened, complicated shaped metallic molds can be easily designed, and highly precise processed data can be obtained.

ADVANTAGE - DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of product solid integrated with thin film solids.

ADVANTAGE - (A) Product solid; (B1,B2) Thin film solid; (t) Film thickness.

Title Terms/Index Terms/Additional Words: DESIGN; METHOD; METALLIC;  
COMPUTER ; SYSTEM; SUBTRACT; PRODUCT; SOLID; INTEGRATE; THIN; FILM; FORM;  
CAVITY; CORE; PART

## Class Codes

International Classification (Main): B29C-033/38, G06F-019/00  
(Additional/Secondary): B29C-045/26, G06F-017/50  
US Classification, Issued: 700197000, 700182000, 700118000

File Segment: CPI; EPI  
DWPI Class: A32; T01  
Manual Codes (EPI/S-X): T01-J15  
Manual Codes (CPI/A-M): A11-B16

## Polymer Indexing

<01>

\*001\* 018; P0000; S9999 S1434  
\*002\* 018; ND05; K9416; J9999 J2948 J2915; J9999 J2904

Designing method of metallic mold using computerised system...

## Original Titles:

...Method and apparatus for designing molds using 3-dimensional CAD system.

**Alerting Abstract** ...An INDEPENDENT CLAIM is also included for a computer -aided design (CAD) apparatus for metallic products, in which recording media for carrying out various...

...USE - For metallic mold designing with CAD systems...

...ADVANTAGE - Design time is shortened, complicated shaped metallic molds can be easily designed , and highly precise processed data can be obtained...

## Documentation Abstract

...An INDEPENDENT CLAIM is also included for a computer -aided design (CAD) apparatus for metallic products, in which recording media for carrying out various...

...USE - For metallic mold designing with CAD systems...

...ADVANTAGE - Design time is shortened, complicated shaped metallic molds can be easily designed , and highly precise processed data can be obtained...

**Title Terms.../Index Terms/Additional Words:** COMPUTER ;

## Original Publication Data by Authority

## Original Abstracts:

...This method can thus divide a mold into a cavity and a core easily when product data is converted to solids for designing a mold using a 3 - dimensional CAD system.

## Claims:

A method for designing molds using a 3-dimensional CAD system, comprising steps of: forming a first cavity in a mold block...

23/69,K/11 (Item 11 from file: 350)  
 DIALOG(R)File 350:Derwent WPIX  
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0009104186

WPI ACC NO: 1999-023357/199902

XRAM Acc No: C1999-007011

**Production of large blow-moulded drinks bottles in e.g. polyethylene terephthalate - by blowing partitioned precursor from preform, applying finite element analysis, correcting and repeating, finally blowing bottle desirable in its handling, solidity, lightness and economy**

Patent Assignee: PEPSICO INC (PEPS)

Inventor: VALYI E I; VALYI E L

**Patent Family** (10 patents, 78 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 5837170	A	19981117	US 1996771234	A	19961220	199902 B
WO 1999042277	A1	19990826	WO 1997US23240	A	19980223	199942 NCE
AU 199865327	A	19990906	WO 1997US23240	A	19980223	200003 NCE
			AU 199865327	A	19980223	
CN 1241961	A	20000119	CN 1997180822	A	19980223	200023 NCE
			WO 1997US23240	A	19980223	
AU 720928	B	20000615	WO 1997US23240	A	19980223	200036 NCE
			AU 199865327	A	19980223	
CZ 199902134	A3	20000614	WO 1997US23240	A	19980223	200037 NCE
			CZ 19992134	A	19980223	
MX 199905126	A1	19991201	MX 19995126	A	19990602	200110 E
EP 1073553	A1	20010207	EP 1997955007	A	19980223	200114 NCE
			WO 1997US23240	A	19980223	
HU 200004355	A2	20010328	WO 1997US23240	A	19980223	200124 NCE
			HU 20004355	A	19980223	
JP 2001510410	W	20010731	WO 1997US23240	A	19980223	200148 NCE
			JP 1998547520	A	19980223	

Priority Applications (no., kind, date): HU 20004355 A 19980223; CZ 19992134 A 19980223; JP 1998547520 A 19980223; AU 199865327 A 19980223; EP 1997955007 A 19980223; CN 1997180822 A 19980223; WO 1997US23240 A 19980223; US 1996771234 A 19961220

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
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US 5837170	A	EN	9	8	
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WO 1999042277	A1	EN			
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National Designated States,Original: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Regional Designated States,Original: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 199865327	A	EN			PCT Application WO 1997US23240 Based on OPI patent WO 1999042277
CN 1241961	A	ZH			PCT Application WO 1997US23240
AU 720928	B	EN			PCT Application WO 1997US23240 Previously issued patent AU 9865327

CZ 199902134	A3	CS			Based on OPI patent WO 1999042277 PCT Application WO 1997US23240
EP 1073553	A1	EN			Based on OPI patent WO 1999042277 PCT Application WO 1997US23240

Regional Designated States,Original: AT BE CH DE DK ES FI FR GB GR IE IT

LI NL PT SE  
HU 200004355

A2 HU

JP 2001510410 W JA 26

PCT Application WO 1997US23240  
Based on OPI patent WO 1999042277  
PCT Application WO 1997US23240  
Based on OPI patent WO 1999042277

#### Alerting Abstract US A

This new process forms a blow-moulded plastic container for carbonated drinks, e.g. Pepsi (RTM). A blow-moulded plastic precursor is produced from a preform. This includes a wall (50) across the internal cavity, connecting portions of the inner surface. The relationship of tensile strength and deformation, due to applied internal pressure, is determined in selected locations. This data is used to compute wall thickness and shape of an altered precursor of otherwise generally similar form, which will deform under pressure into a desired shape. The second precursor is made as computed, and blown to that desired shape.

USE - To make a large plastic container from PET, polyolefins or other materials, especially for drinks carbonated under pressure.

ADVANTAGE - The method makes containers by blow moulding, improved in configuration and of larger size, e.g. 3 litres or more. Undesirable thickness and morphology are avoided. There is no undue increase in the cost or weight of plastic used. Any handgrip included, retains its shape and usefulness, when the container is internally pressurised. The container has internal compartments and support walls, and the final shape is predictable under internal pressure. It may be feasible to use compartments for differing drinks. Stable handgrips clearly facilitate handling of larger bottles.

**Title Terms/Index Terms/Additional Words:** PRODUCE; BLOW; MOULD; DRINK; BOTTLE; POLYETHYLENE; TEREPHTHALATE; PARTITION; PRECURSOR; PREFORM; APPLY; FINITE; ELEMENT; ANALYSE; CORRECT; REPEAT; FINAL; HANDLE; SOLID; LIGHT; ECONOMY

#### Class Codes

International Classification (Main): B29C-049/18, B29C-049/20, B29C-049/78  
(Additional/Secondary): B29L-022/00  
US Classification, Issued: 264040100, 264524000, 264532000, 264537000, 215006000

File Segment: CPI

DWPI Class: A32; A92

Manual Codes (CPI/A-M): A11-B10; A12-P06A

#### Polymer Indexing

<01>

\*001\* 018; P0884 P1978 P0839 H0293 F41 D01 D11 D10 D19 D18 D31 D50 D63 D90  
E21 E00; S9999 S1434; S9999 S1536-R  
\*002\* 018; G0033-R G0022 D01 D02 D51 D53; H0000; H0011-R; S9999 S1434;  
S9999 S1536-R; P1150  
\*003\* 018; ND07; N9999 N6451 N6440; Q9999 Q8399-R Q8366; Q9999 Q7589-R;  
B9999 B4842 B4831 B4740; B9999 B5243-R B4740

#### Documentation Abstract

...to desired limits. The stress distribution under internal pressure of the precursor is determined, to **design** a desired blow- **moulded** plastic container. The first precursor is pressurised, determining the stress distribution and deformation. This stress...

#### Original Publication Data by Authority

#### Original Abstracts:

...the relationship of tensile stress to deformation are measured in several chosen locations in a **model** precursor container. The **data** from the **model** is used to **alter** the shape of **the** precursor container at areas of stress concentration so that excessive deformation at these areas is...

...the relationship of tensile stress to deformation are measured in several chosen locations in a **model** precursor container. The **data** from the **model** is used to **alter** the shape **of** the precursor container **at** areas of **stress** concentration so that **excessive** deformation at these areas is avoided and the desired finished container (40) is obtained...

**Claims:**

...pattern of deformation in said internal and external walls due to stresses resulting from the **application** of internal pressure; thereby providing a desired blow molded **plastic** container.

29/69,K/2 (Item 2 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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0007388547

WPI ACC NO: 1995-336559/199543

Related WPI Acc No: 1998-017862

XRAM Acc No: C1995-148412

XRPX Acc No: N1995-252373

**Prodn. tooth mould by scanning surface of model - processing surface  
information in computer to give tooth path programme used to control  
mould milling**

Patent Assignee: DENTSPLY INT INC (DENX); DENTSPLY RES & DEV CORP (DENX)

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**Patent Family** (10 patents, 9 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	
US 5452219	A	19950919	US 1990536137	A	19900611	199543	B
			US 1994219804	A	19940329		
EP 756852	A1	19970205	EP 1995112312	A	19950804	199711	NCE
JP 9056731	A	19970304	JP 1995209568	A	19950817	199719	NCE
CA 2155276	A	19970204	CA 2155276	A	19950803	199723	NCE
BR 199503779	A	19970916	BR 19953779	A	19950823	199744	NCE
CN 1144645	A	19970312	CN 1995116212	A	19950904	200103	NCE
EP 756852	B1	20020508	EP 1995112312	A	19950804	200231	NCE
DE 69526654	E	20020613	DE 69526654	A	19950804	200246	NCE
			EP 1995112312	A	19950804		
CN 1099864	C	20030129	CN 1995116212	A	19950904	200534	NCE
CA 2155276	C	20051101	CA 2155276	A	19950803	200576	NCE

Priority Applications (no., kind, date): CN 1995116212 A 19950904; BR  
19953779 A 19950823; JP 1995209568 A 19950817; DE 69526654 A  
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#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 5452219	A	EN	9	1	Continuation of application US 1990536137
EP 756852	A1	EN	9	1	
Regional Designated States,Original: CH DE GB IT LI					
JP 9056731	A	JA	9	1	
CA 2155276	A	EN			
BR 199503779	A	PT			
EP 756852	B1	EN			
Regional Designated States,Original: CH DE GB IT LI					
DE 69526654	E	DE			Application EP 1995112312 Based on OPI patent EP 756852
CA 2155276	C	EN			

#### Alerting Abstract US A

False teeth each have a moulded coating and high definition labial striations. Each is made by providing a tooth model which is scanned and the resulting reflections received and translated into electronic signals. These are converted into data which is edited to add high definition labial striations using a **design** programme. A **tooth mould part** is fabricated using the edited **data** to direct a milling machine. The machine has at least two mills, the first being used to make a first pass over the mould part and the second a second pass. The second mill end is smaller than the



first. Further mould parts are formed to create a set of high definition false teeth.

USE - To mfr. a tooth mould used for the mfr. of false teeth.

ADVANTAGE - The mould produces false teeth with high definition qualities. The mould is made faster and more cheaply than previously and without the skills of a specialist worker.

**Title Terms/Index Terms/Additional Words:** PRODUCE; TOOTH; MOULD; SCAN;  
SURFACE; MODEL; PROCESS; INFORMATION; **COMPUTER** ; PATH; PROGRAMME;  
CONTROL; MILL

#### **Class Codes**

International Classification (Main): A61C-013/00, A61C-013/08, A61C-013/34,  
A61C-003/00, A61C-005/10, G06F-019/00  
(Additional/Secondary): B23Q-015/00, G05B-019/4099, G06T-001/00  
US Classification, Issued: 364474050, 364413280, 364474240, 364476000,  
433223000

File Segment: CPI; EngPI; EPI

DWPI Class: A96; D21; T01; T06; P32; P56

Manual Codes (EPI/S-X): T01-J07; T01-J15X; T06-A04; T06-A07

Manual Codes (CPI/A-M): D08-A03

...processing surface information in computer to give tooth path  
programme used to control mould milling

#### **Original Titles:**

... MANUFACTURE OF IMPRESSION OF TOOTH

**Alerting Abstract** ...are converted into data which is edited to add high definition labial striations using a **design** programme. A tooth **mould part** is fabricated using the edited **data** to direct a milling machine. The machine has at least two mills, the first being...

#### **Documentation Abstract**

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**Title Terms.../Index Terms/Additional Words:** **COMPUTER** ;

#### **Original Publication Data by Authority**

#### **Original Abstracts:**

...data on the three-dimensional surface locations of the model, processing the data in a **CAD /CAM computer** (20), and using the processed data to fabricate a tooth mold (34). The scanning step involves subjecting a rotating...

...data on the three-dimensional surface locations of the model, processing the data in a **CAD /CAM computer** , and using the processed data to **fabricate** a **tooth** mold. The scanning step **involves** subjecting a rotating tooth **model** to radiant energy from a laser **beam** , receiving and translating reflections of the radiant energy into electronic signals, and digitizing the signals...

#### **Claims:**

...energy from said tooth model(14), (3) translating said reflections into electronic signals, and(4) **converting** said electronic signals into **data**

of the three-dimensional surface locations on said tooth model (14), (b) processing said data, said... .

...a three-dimensional surface pattern (26) of said tooth model (14), (4) evaluating said surface **pattern** of said tooth **model** ( 14 ) by visually analyzing the surface pattern for high-definitional qualities, and creating a new three...

...a) scannerisation d'un modele de dent (14); ladite etape de scannerisation comprenant: (1) l' **application** d'une energie d'imagerie audit modele de dent (14), (2) la reception de reflexions...

...de traitement comprenant: (1) la traduction desdites donnees, (2) la mise en forme desdites donnees, ( 3 ) la creation d'une configuration de surface en trois dimensions (26) dudit modele de dent ...of said tooth model, said edited data being representative of the surface of said dental **artificial** teeth, said **edited** data **being** adapted by said milling program to direct said milling along said tool path and repeatedly m...